

## MEETING MINUTES (FINAL)

### CITY OF TUCSON HABITAT CONSERVATION PLAN

#### Technical Advisory Committee

Wednesday, April 18, 2007, 1pm to 3pm

Arizona Game and Fish Department

Tucson, Arizona

#### ATTENDEES:

##### City of Tucson Technical Advisory Committee:

Rich Glinski

Marit Alanen (US Fish and Wildlife Service)

Guy McPherson (University of Arizona)

Dennis Abbate (Arizona Game and Fish Department)

Ralph Marra (Tucson Water Department)

Trevor Hare (Sky Island Alliance)

##### Other Attendees:

Leslie Liberti, (City of Tucson – Office of Conservation and Sustainable Development)

Ann Audrey (City of Tucson – Office of Conservation and Sustainable Development)

Geoff Soroka (SWCA)

David Jacobs (Arizona State Land Department)

#### 1. Minutes

None available for review at this time

#### 2. Updates

Tortoise. Trevor reported that Julia Fonseca pulled together a base map on Desert Tortoise covering all of Pima County. There was a tortoise seen at CAVSARP and this will be added to the map. The map includes the 1989 AGFD tortoise habitat model. Caliche layers and washes will be added. The map will be circulated among tortoise experts to add information. ***Trevor will get GIS layers of Tucson and Avra Valley area for use by Tucson and Marana HCP groups.\****

Buffelgrass. Ann reported buffelgrass is greening out in Avra Valley and Tucson Water is poised to spray the mowed, nonmowed and burned treatment areas in Avra Valley.

Southland Maps from last meeting. For people who were not at the last meeting, Leslie reviewed the maps that were handed out. Ralph asked if the bat roosting areas shown on maps have actual roosts. She said this was a map of suitable roosting habitat but not specific roosts. Leslie noted that per Linwood's comments at the last meeting, the buffers of 50- and 100-feet for PTBB where the most appropriate buffer distances to address, so there are close-ups of these provided on maps at today's meeting. As decided at an earlier meeting, species have been grouped according to their general habitat types: 1) Strictly

riparian species found along Cienega Creek, 2) species that use riparian-related species (CFPO, YBC, PTBB) and 3) upland species (BUOW, LLNB, tortoise)

Research Proposal. Leslie handed out a proposal for research on LLNB provide by Michael Ingraldi of Arizona Game and Fish Department. TAC members should review this to discuss at the next meeting. The goal will be to get the Segment 3 grant in place by mid summer to help support this bat research.

Schedule updates. Leslie reviewed the schedule update handed out at the last meeting. The plan is to start the Segment 3 grant this summer and extend the Segment 2 grant until June 2008. The Segment 3 grant can be used to support species research, including the LLNB research in Michael Ingraldi's proposal. ***OCSD will email this schedule handout to TAC members.***

### **3. Southlands Discussion**

#### Pale Townsend's Big Eared Bat (PTBB) discussion

Leslie handed out a close-up aerial map of a randomly selected land area in Southlands showing the buffer area around riparian areas for PTBB. Distances were measured from the outer edge of riparian habitat for 50-foot and 100-foot buffers. The 50-foot buffer captured 10% of the original habitat mapped for PTBB as shown in the draft HCP. With the 100-foot buffer, around 20% of the original habitat was captured. Leslie noted the bat uses the habitat in the buffer not the riparian area itself.

In answer to Rich's question about whether impacts to habitat quality of adjacent riparian and/or upland habitat could affect habitat in the buffer, Leslie clarified that this is an attempt to quantify the buffer location and area, and is not yet a description of buffer habitat. Rich felt the narrative for the buffer should be developed. Trevor stated he prefers the 100-ft buffer saying it is better for the desert anurans in the washes, though they are not covered by the HCP. Geoff noted some buffer areas will be more moist than others and could support more insect life, plus some buffer areas are farther from thick riparian habitat than others. He asked if the buffers can be fine-tuned to reflect habitat quality. Rich wondered what is being captured by the edge maps, and wondered if a 100-foot buffer is sufficient. He felt anurans should be dropped and suggested using a 300-foot buffer to capture the difficult-to-save edge. Trevor felt we need to get a handle on what the elements of the edge are, including structure, species, etc. Rich concluded we need to refine the edge characteristics and size when Linwood Smith is present at the next meeting.

#### City RPAC, Watercourse Standards, Native Plant Protection Ordinance, and proposed mitigation fund

Leslie updated the TAC about the conversion of the original HCP stakeholders group to the Resource Planning Advisory Committee (RPAC). Representatives from the Metropolitan Energy Commission, Defenders of Wildlife, SAGE Landscape Architecture, and the Planning Center have been added to complete the RPAC

membership. RPAC will make recommendations on the HCP. The TAC can also make recommendations to RPAC based on work in this meeting.

Trevor asked how the City watercourse protection ordinance overlays with the PTBB buffer in terms of riparian habitat that would be protected. Leslie summarized the watercourse regulations for the city, which consist of WASH Ordinance, ERZ Ordinance, and Regulatory Floodplain Ordinance. Specific watercourses have been specified as WASH and ERZ washes by the City and are regulated accordingly. The determination of whether additional watercourses will be regulated is based on whether they meet the criteria of Regulatory Floodplain watercourses, which is determined for each site based on whether discharge in a 100-year event is 100 cubic feet per second or greater.

The City revised the development standard for watercourses in November 2006 to increase regulatory consistency between WASH, ERZ and Regulatory Floodplain watercourses. When a new property comes into the city and submits an application to develop, staff determine which watercourse regulations might be applicable. If the applicant does not encroach in the 100-year floodplain of a Regulated Floodplain or ERZ watercourse (or the defined study area in the case of a WASH Ordinance watercourse), there is no further regulatory action. If an applicant does plan to encroach, the Protected Riparian Area (PRA) (riparian vegetation meeting the criteria described in the development standard) needs to be mapped as part of a required Environmental Resources Report. If the proposed development will not encroach into this defined PRA, there are no further watercourse requirements. Perpendicular crossings of the watercourse are generally allowed encroachments. If the applicant intends to impact >5% of the PRA besides allowed crossings, they must submit a Development Standard Modification Request. If proposed encroachment is <5% that constitutes a minor DSMR. Preparation of a mitigation plan and conducting on-site mitigation to replace lost habitat are required. The focus in the current standards is on riparian vegetation rather than riparian function.

Leslie noted the Environmentally Sensitive Land Ordinance is a good direction to go in to address buffer areas from a regulatory standpoint since the current watercourse protection ordinances focus strictly on riparian vegetation. Per Leslie, City staff has taken the Harris maps, Important Riparian Area maps, flood control work and tobosa grass areas, and incorporated these into the current watercourse development standards. Trevor noted that Frank Sousa with City Stormwater has done quite a bit of ground truthing on the washes.

Leslie reported on the Native Plant Protection Ordinance (NPPO) saying there are three approaches to complying with NPPO:

- Full inventory and determination of protection level for different species.  
Mitigation ratios are applied in this case
- Appraisal method with determination of the value of impact and determination of associated mitigation requirements
- Set aside method, which specifies various ratios of open space to be set aside relative to the total site acreage and plant species present

Leslie noted the City is working on creating a mitigation fund to allow collection of fees for projects that impact riparian vegetation. The mitigation pool would be available for City and private projects within the City. The fund would carry over year-to-year and could potentially receive NPPO in-lieu mitigation fees as well. Leslie said representatives from the City's RPAC, Landscape Advisory Committee (LAC), Stormwater Advisory Committee (SAC), and the HCP TAC could be consulted to determine appropriate mitigation areas and project that could receive in-lieu fees.

Rich suggested that in terms of mitigation, the City could consider buying into the County Pima Pineapple cactus mitigation bank as well. Geoff noted in-lieu mitigation is typically a last resort for mitigation. Leslie reiterated that linear projects are being used as the first trial for the mitigation fund because of the difficulty in those cases of conducting mitigation on site.

#### Discussion of Southlands Conservation Program for CFPO, PTBB and YBC

Leslie said she revised the Southlands Conservation Program from the draft HCP for Riparian-associated species (excluding those found solely in Cienega Creek). She handed out the revised text as a starting point for discussion. The goals are to maintain existing suitable habitat, reduce barriers to movement, minimize potential for mortality, and promote integrated regional conservation planning. Goal 1, Measure 1 was revised to reflect the City's watercourse ordinances, revised watercourse development standard, and the watercourse protection policy. Together, these would permanently protect riparian habitat suitable to the riparian-associated species. Measure 2 would protect habitat in the southern two watersheds of the Southlands (Petty Ranch and Fagan Watersheds). Leslie then passed out a map of watershed boundaries in the Southlands. (She noted the watershed map layer does not cover the entire planning area. ***OCSD check with Frank Sousa for USGS layer with more watershed data.***) The two southern watersheds in the Southlands--shown in cross hatch on the map--have higher densities of habitat than other watersheds, less transportation obstructions, and other positive reasons to incorporate these particular watersheds as a focal point of conservation.

Leslie passed out the map of YBC habitat. This same information was seen on a larger map at the previous meeting. Leslie then handed out tables of stressors and threats for CFPO, PTBB, YBC. These have not been updated since last year's HCP report. Leslie provided a map with YBC, CFPO, PTBB habitat shown overlapping on the same map. The red area is listed as YBC habitat, but includes CFPO and PTBB throughout the red area. Noting the YBC habitat along Nogales highways, Dennis A. asked if there are large trees in this location. Geoff reported that Brian Wooldridge based the YBC mapping on review of aerial photos rather than walking the site.

#### **CFPO**

An area midway through the Southlands is shown in blue. This was the area determined by Scott Richardson to contain no suitable habitat for CFPO, so it constitutes only PTBB foraging habitat in the riparian buffer areas. Dennis A. commented that CFPO use both high-density vegetation and low density vegetation corridors if there are suitable perches.

Leslie responded that if you do Measures 1 and 2, a west-to-southeast corridor is created through the Southlands but not a southwest-to-northeast corridor. Perhaps moving throughout the Lee Moore watershed basin study area is an option since CFPO can perch on saguaros, creosote, and other plant species. Dennis A. was concerned that showing the blue area as non-habitat area for CFPO implies CFPO would have a hard time passing through that area, but he is not sure if this is true or not. Leslie said Scott felt the combination of low quality habitat in the blue area, and barriers created by the railroad and interstate, resulted in this area being unsuitable for CFPO. Rich said the boundary of the blue area looked arbitrary. ***OCSD invite Scott Richardson to the next TAC meeting to discuss criteria for CFPO habitat.*** Dennis suggested mapping CFPO habitat suitable for breeding, vs. foraging vs. dispersal, with the blue area shown as lower-grade dispersal habitat and other areas shown as higher-grade dispersal habitat, as appropriate. ***OCSD make the requested revisions to maps.***

### **PTBB**

Dennis A asked if all PTBB areas on the map are foraging. Leslie confirmed there are no roosting areas mapped. PTBB tend to roost in bridges, drainage structures, caves, etc. Trevor asked that PTBB roost sites be mapped, which led to a series of questions the group wanted Linwood to consider before the next meeting: 1) what should a narrative description of the characteristics of appropriate buffers for PTBB foraging contain, 2) what types of roost do the bats use, and 3) should the roosts be mapped and if so, where? ***OCSD send questions to Linwood.***

### **General conservation measures**

Leslie asked the TAC to address conservation measures in the Southlands for CFPO, PTBB and YBC. In areas where the TAC feels development should be reduced, she said there was a need to specify what this reduction would look like. State Land will be developing conceptual plans for land use for their holdings in this area. The watercourse ordinances are in place to protect habitat. In terms of barriers to movement, the NPPO could encourage placement of the correct plants, though not necessarily in the right density and configuration. TAC member input was that roads should follow environmentally sensitive guidelines, the number of watercourse crossings should be minimized, any impacts to habitat areas should be revegetated when possible, and they should retain saguaros, trees, etc. Any new bridges should be designed to be favorable for bat use. ***OCSD check on status of Lee Moore Wash study group and communicate TAC comments.***

### **Discussion of watershed approach and other approaches to conservation area**

Trevor said the Town of Sahuarita may be planning to impact the southern watershed in the Southlands, which has been the focus area for conservation strategies based on earlier Southlands discussion. He felt it may be necessary to revise the watershed-based protection approach in order to address plans of surrounding jurisdictions. One suggestion was to preserve all of Fagan watershed, plus parts of other watersheds to the east and up into Rincon Valley where YBC breeding and dispersal habitat is found. Leslie suggested ignoring watershed boundaries for now and looking at this area from a species-specific framework for CFPO, PTBB and YBC to determine key elements needed

to maintain the species here. Trevor suggested creating a U-shaped conservation area along Nogales Highway on the west, along the south end of the study area, then up the east side of the study area into Rincon valley. He felt that since the topography of the blue mapped area is flatter, it is a better area for development. Dennis contended that loss of the blue area would result in a loss of connectivity, but said it may be a lower priority area than others in the Southlands.

Trevor noted there had been discussion of a preserve in the southern watersheds in earlier Southlands meetings and asked if something similar to a conservation land system (CLS) would work, where the percent of land that could be developed was lower within a Southlands CLS than outside it. Leslie said a CLS-like approach would recognize that development of some kind would occur, and would allow for different types of appropriate development depending on the area. She noted it would be less extensive than the Pima County CLS and said it was important to be judicious in picking a CLS areas.

Leslie asked if extending the area where development could occur at higher densities (aka, the blue area) to Nogales Highway on the west and raising the southern boundary of the blue area would provide better connectivity. The connection between the land east of Nogales Highway and the Santa Cruz River to the west is poor and there is development occurring there now. Dennis said owls found near I-19 were located south of the mine, near Continental Road in Green Valley. One owl went north through the mines and ended up in the Black Mountain - Esperanza Wash area. Trevor noted the land west of Nogales Highway is mostly reservation land. He went on to ask if there can be large parks buffering washes. Leslie said we should look at areas located between patches of breeding habitat to see what is needed in these intervening areas. Dennis asked what it means in terms of impacts to habitat if land is not within a conservation area? Leslie noted that watercourse ordinances would be enforced both inside and outside conservation areas.

Leslie asked the TAC how to start identifying tiers of land to be preserved. She suggested as a starting point that the blue area might be subject to existing City ordinances only, with the possible addition of more land to the west being put in the blue category, while removing some of the south area from the blue designation. She asked if areas west of the Diamond development--which is being constructed on State Land in the southern part of the study area--could be treated in the same way as the blue areas east of this development. The southern part of the study area would be the highest tier for preservation, with the middle tier being the land area between the high and low tier areas. Rich suggested making a U-shaped area.

Rich felt CFPO would cross the interstate, and the coarse soils of the upland provide the most diverse habitat and should be the focus of conservation. Lower fine-grained soils with creosote have less value in his opinion. A possible criteria for lower value habitat would be mapping creosote monocultures, which reflects the area of fine-grained soils. ***Check Brownlow and Pace to find the division between semi-desert grassland and paloverde mixed cactus.*** It was noted that Davidson Canyon is the only good wildlife crossing area in the southeast area. The railroad has a new plan to straighten out a dip

near Marsh Station road to the east which could make another wildlife friendly crossing site, though this is outside the study area.

### **Additional mapping and data needs**

Leslie said the next step is to add more data to the map and see if this provides more insight. Trevor asked about the relationship between the study area and the Rocking K development to the north, and what conservation measures, set asides and other conservation measures were specified in the Rocking K Specific Plan. This led to a list of mapping needs and other data needs for this and other developments in or near the study area, as listed below.

Requests for additional information on maps:

- Outline of Rocking K north and south on the study area map.
- Outline the Houghton Area Master Plan (HAMP)
- Other watersheds not currently mapped within the study area
- Cacti polygons from Marc Baker showing more density information
- Davis Monthan paddle map

### **Other data needs:**

- Powerpoint presentation from Diamond Ventures regarding Rocking K they are presenting to RPAC
- Information on conservation measures, set asides and other conservation measures were specified in the Rocking K Specific Plan
- Status of Vail-area development
- Status of Diamond land trade along Sahuarita Road?
- Whether conservation be conducted within the paddle for DM?
- What the wash set aside requirements are for the Diamond development south of Raytheon, are these congruent with City wash protection to the east and west of this site?

*OCSD will bring extra copies of draft HCP to TAC at the next meeting.*

*OCSD has new large binders for TAC members who have not yet received them.*

### **4. Topics at upcoming meetings**

Continue with Southlands discussion

### **5. Call to audience**

No audience at the meeting

### **6. Adjournment**